



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

NOTICE OF ALLOWANCE AND ISSUE FEE DUE

LMC1/0414

MURRAY LEONARD  
8360 WINTER SPRINGS LANE  
LAKE WORTH FL 33467

APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
09/079,298	05/12/98	009	CROCKETT, R	2787 04/14/00
First Named Applicant	PAUL,	35 USC 154(b) term ext. = 0 Days.		

TITLE OF INVENTION SOFTWARE MANAGEMENT OF AN INTELLIGENT POWER CONDITIONER WITH BACKUP SYSTEM OPTION EMPLOYING TREND ANALYSIS FOR EARLY PREDICTION OF AC POWER LINE FAILURE

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
0 M-553	700-293.000	L20	UTILITY	YES	\$605.00	07/14/00

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.**

**THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.**

**HOW TO RESPOND TO THIS NOTICE:**

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
- B. If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.

II. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give application number and batch number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

PATENT AND TRADEMARK OFFICE COPY

#3/C

**Notice of Allowability**

Application No.

09/079,298

Applicant(s)

PAUL ET AL.

Examiner

Robert G. Crockett

Art Unit

2787

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.

1. ☒ This communication is responsive to the application filed 5/12/98
2. ☒ The allowed claim(s) is/are 1,2 and 4-10. renumbered 1-9
3. ☐ The drawings filed on \_\_\_\_\_ are acceptable.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All    b) ☐ Some\*    c) ☐ None    of the CERTIFIED copies of the priority documents have been
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number). \_\_\_\_\_.
3. ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

5. ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

A SHORTENED STATUTORY PERIOD FOR REPLY to comply with the requirements noted below is set to EXPIRE **THREE MONTHS** FROM THE "DATE MAILED" of this Office Action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be available under the provisions of 37 CFR 1.136(a).

6. ☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
7. ☒ Applicant MUST submit NEW FORMAL DRAWINGS
- (a) ☐ because the originally filed drawings were declared by applicant to be informal.
- (b) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review( PTO-948) attached
- 1) ☒ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
- (c) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the examiner.
- (d) ☐ including changes required by the attached Examiner's Amendment / Comment.

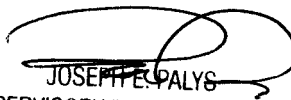
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.**

8. ☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any reply to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE / SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

**Attachment(s)**

- 1 ☒ Notice of References Cited (PTO-892)
- 3 ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 5 ☒ Information Disclosure Statements (PTO-1449), Paper No. 2.
- 7 ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 2 ☐ Notice of Informal Patent Application (PTO-152)
- 4 ☐ Interview Summary (PTO-413), Paper No. \_\_\_\_\_.
- 6 ☒ Examiner's Amendment/Comment
- 8 ☐ Examiner's Statement of Reasons for Allowance
- 9 ☐ Other

  
JOSEPH E. PALYS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2700

Art Unit: 2787

#3/a

**DETAILED ACTION**

**EXAMINER'S AMENDMENT**

The application has been amended as follows:

In the Abstract:

In line 12: replace – need for said – with “need for an”

In line 13: replace – if said inverter – with “if an inverter”

***Allowable Subject Matter***

1. The following is an examiner's statement of reasons for allowance:

The prior art of record and cited by the examiner does not teach or suggest a system with all the following limitations in combination:

a microprocessor based control system which:

employs trend analysis for early prediction of AC power line failure;

provides suitable alarms when an operating input AC line is imminently defective;

initiates an inverter control signal when an inverter module is attached as an option;

Art Unit: 2787

analyzes the input and output voltages;  
provides analysis of input voltage surges and sags;  
measures transient amplitude and transient pulse width;  
counts glitches, and discontinuities or dropouts;  
measures frequency;  
identifies each defect;  
computes associated trends;  
stores all accumulated data in a Log Buffer for digital printout and video display;  
provides appropriate alarms to the user;  
advises of imminent power failure and the need for attaching an inverter module which can be attached by simple plug in.

All of the above limitations have been interpreted in light of the applicant's specification (pp. 34-47).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert G. Crockett whose telephone number is 703-308-6107. The examiner can normally be reached on M-Th (7:30:6:00) Friday off.

Art Unit: 2787

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Palys can be reached on 703-308-9685. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3718 for regular communications and 703-305-3718 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-7244.

RGC  
April 11, 2000



JOSEPH E. PALYS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2700